

Date: Thu, 30 Jun 94 04:30:27 PDT
From: Ham-Space Mailing List and Newsgroup <ham-space@ucsd.edu>
Errors-To: Ham-Space-Errors@UCSD.Edu
Reply-To: Ham-Space@UCSD.Edu
Precedence: Bulk
Subject: Ham-Space Digest V94 #172
To: Ham-Space

Ham-Space Digest Thu, 30 Jun 94 Volume 94 : Issue 172

Today's Topics:

 A0-13 and Field Day (3 msgs)
 decoding telemetry by telephone modem ?
 Element Files Standard (2 msgs)
 S. Trakcing Prg Recommendation
 Satellite Tracking

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>
Send subscription requests to: <Ham-Space-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Space Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-space".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Wed, 29 Jun 1994 14:59:27 GMT
From: ihnp4.ucsd.edu!agate!library.ucla.edu!europa.eng.gtefsd.com!uhog.mit.edu!
nntp.club.cc.cmu.edu!news.mic.ucla.edu!unixg.ubc.ca!quartz.ucs.ualberta.ca!
gov.nt.ca!ve8ev@network.ucsd.edu
Subject: A0-13 and Field Day
To: ham-space@ucsd.edu

In article <1994Jun29.083523.6609@ee.ubc.ca> davem@ee.ubc.ca (Dave Michelson)
writes:

>Did anyone else manage to work anybody through A0-13 on Field Day?

>

We heard the beacons loud and clear but the transponders were
>absolutely silent. Was this just a case of a really bad squint angle
>or was there something else going on?

>

--

>Dave Michelson ve7tsx
>davem@ee.ubc.ca

>

Same here. I think it was the squint angle though. At about 1130UTC
I did manage to hear my own CW and a few other stations on the downlink
but signals were too weak for me to copy. It does seem strange that
it was not working at the beginning of the orbit. I had the beacon
at S-9 when it was already 11000 km out but nothing else was heard.
Oh well. Moving to attitude 180/0 on July 11 :-) :-)
=====

John Boudreau VE8EV INTERNET: ve8ev@amsat.org
Inuvik, NWT, CANADA PACKET: VE8EV@KL7GNG.#NAK.AK.USA.NA
=====

Date: 29 Jun 1994 12:03:04 -0600
From: ihnp4.ucsd.edu!usc!math.ohio-state.edu!howland.reston.ans.net!spool.mu.edu!
mnemosyne.cs.du.edu!nyx10.cs.du.edu!not-for-mail@network.ucsd.edu
Subject: A0-13 and Field Day
To: ham-space@ucsd.edu

davem@ee.ubc.ca (Dave Michelson) writes:

>Did anyone else manage to work anybody through A0-13 on Field Day?

>We heard the beacons loud and clear but the transponders were
>absolutely silent. Was this just a case of a really bad squint angle
>or was there something else going on?

>--

>Dave Michelson ve7tsx
>davem@ee.ubc.ca

Yes at the USECA clubs FD we made a few QSO's on A0-13 right as the contest
began and then a few more on it's next pass closer to the end of the contest.

73, Nate N8MBK
nburnett@nyx.cs.du.edu

Date: 29 Jun 1994 19:08:15 -0400
From: ihnp4.ucsd.edu!swrinde!howland.reston.ans.net!news.intercon.com!
news1.digex.net!digex.net!not-for-mail@network.ucsd.edu
Subject: A0-13 and Field Day
To: ham-space@ucsd.edu

In article <1994Jun29.083523.6609@ee.ubc.ca>,

Dave Michelson <davem@ee.ubc.ca> wrote:
>Did anyone else manage to work anybody through A0-13 on Field Day?
>
>We heard the beacons loud and clear but the transponders were
>absolutely silent. Was this just a case of a really bad squint angle
>or was there something else going on?
>
>--
>Dave Michelson ve7tsx
>davem@ee.ubc.ca
>
>
>
>
>

Date: Wed, 29 Jun 1994 13:37:50 GMT
From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!europa.eng.gtefsd.com!emory!
rsiatl!ke4zv!gary@network.ucsd.edu
Subject: decoding telemetry by telephone modem ?
To: ham-space@ucsd.edu

In article <juergen.putzger.16.0@physik.uni-regensburg.de>
juergen.putzger@physik.uni-regensburg.de (Juergen Putzger) writes:
>I would like to decode the telemetry of DOVE-OSCAR17. Is it possible to do
>this with an ordinary telephone modem (Hayes compatible, max. 2400 Baud) ?
>The transmission rate is 1200 Baud AFSK (like packet radio). A circuit will
>be needed to simulate the telephone line, i suppose a DC-source in
>series with a transformer would do the job. Has anyone tried this with
>success?

Sorry, the packet signals are Bell 202 standard, your modem is Bell 212
at 1200 baud. They aren't compatable. However, a cheap little Baycom
adapter will work with the PC.

Gary

--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

Date: 29 Jun 1994 11:34:31 GMT
From: ihnp4.ucsd.edu!agate!usenet.ins.cwru.edu!lerc.nasa.gov!magnus.acs.ohio-

state.edu!slip1-22.acs.ohio-state.edu!user@network.ucsd.edu
Subject: Element Files Standard
To: ham-space@ucsd.edu

In article <n7ryw.21.000054E6@teleport.com>, n7ryw@teleport.com (William Roth) wrote:

>
> This makes it very difficult for programmers and users alike to find these
> files when it comes time to update. Since this is done as often as 3 times a
> week or more, I think that there should be some sort of standardization for
> the filenames used.

This is unlikely since the names that amateurs wish to call their satellites are not the same as those assigned by NASA.

>
> I won't go into what I have been thinking of, since I would rather hear
> completely fresh opinions, unbiased by my suggestions. I have had a few
> responses on the two Kitsats where I posted a similar request, but I want to
> hear from as many as possible before throwing out a proposition.
>
> Filenames are not the only problem. Usually there is extraneous text included
> in the files. This text, though sometimes informative, is enough to drive a
> programmer to take up knitting instead! If anyone has ideas on how to separate
> this extra text, while preserving usability, I would love to hear it!!!

The ID numbers are the starting point. The solution is you write a little program that processes the original 2 line file from NASA. It includes a second file which you prepare that has the ID numbers and the name YOU want to assign to that ID number. The output file is a changed 2 line file with your names, sans stray spaces etc. This is not original with me. Will Marchant, KC6ROL, did this for a special purpose last year.

>
> I will be checking this area for about a week before I formulate a
> proposition, which I will send out for comment, and then present to Amsat,
> NASA, and whoever else might help in implementing a standard.

I hate to throw cold water on an idea but the 'proposal' would be a waste of time. Neither organization is going to listen or change.

>
73,
Ron w8gus.

Date: Wed, 29 Jun 1994 12:59:36 GMT

From: ihnp4.ucsd.edu!agate!library.ucla.edu!csulb.edu!csus.edu!netcom.com!
thomson@network.ucsd.edu
Subject: Element Files Standard
To: ham-space@ucsd.edu

In article <n7ryw.21.000054E6@teleport.com> n7ryw@teleport.com (William Roth)
writes:

>Over the years, I seen a lot of different ways of elements being sent. They
>seem to have boiled down to two types, Amsat and Two line. This is fine, since
>most tracking programs will read both, but there seems to be no
>standardization for filenames.

>

[snip]

>

>Filenamse are not the only problem. Usually there is extraneous text included
>in the files. This text, though sometimes informative, is enough to drive a
>programmer to take up knitting instead! If anyone has ideas on how to separate
^^^^^

>this extra text, while preserving useability, I would love to hear it!!!

^^^^^^^^^^^^^

For files containing 2-line elements, try

```
grep '^([2][0-2])' oldfile > newfile
```

Or you can use a short BASIC program:

```
OPEN "OLDFILE" FOR INPUT AS #1
OPEN "NEWFILE" FOR INPUT AS #2

WHILE NOT EOF(1)
    LINE INPUT #1, A$
    B$ = LTRIM$(RTRIM$(A$))

    IF (LEFT$(B$,2) = "1 " OR LEFT$(B$,2) = "2 ")) AND LEN(B$) = 69 THEN
        PRINT #2, B$
    END IF

WEND
CLOSE
END
```

Date: 29 Jun 1994 17:40:13 GMT

From: ihnp4.ucsd.edu!swrinde!howland.reston.ans.net!spool.mu.edu!vms.csd.mu.edu!
2575BROOKSR@network.ucsd.edu

Subject: S. Trakcing Prg Recommendation
To: ham-space@ucsd.edu

I was wondering if anyone had suggestions as to which Sat Track software would be good to use on a 286 laptop with only a HD floppy? I'm currently using TrakSat, but it just barely runs... and sometimes crashes.

Thanks for any input.
Ryan Brooks

Date: 30 Jun 1994 08:23:36 GMT
From: ihnp4.ucsd.edu!agate!howland.reston.ans.net!pipex!lyra.csx.cam.ac.uk!
warwick!kinguni!usenet%ceres@network.ucsd.edu
Subject: Satellite Tracking
To: ham-space@ucsd.edu

This post is a follow-up to my post last week about a satellite tracking system which I am hoping to write in C for my final year project.

Thanks to the numerous people who replies with suggestions and clips of code in numerous different languages (I didn't realise how similar all these languages were - amazing how much you can relate to either C or Modula-2). Thanks also to all the people who offered to rip the guts out of their programs and send me a sysnopsis (is that the right word?) of the code contained therein.

To those others who requested that I let them know what the outcome was. The answers all lie in the book "Satellite Experimenter's Handbook" by Martin Davidoff, published by the ARRL. This contains a chapter which runs through - step by step - all the formulae and computations needed to track a satellite in real time from the Kepler elements.

The book also explains everything else you could ever want to know about satellites, including specific details on each 'bird' (I might as well try and get the terminology correct).

In response to Tom <WB7ASR> who suggested that I write my program as a Windows .DLL
in C++ I can only say this. What kind of nutter masochist do you think I am? I have done some windows applications programming in my time and I can imagine how hard decent graphics are to do. *imagine a sad shake of the head around here*

The good news for Tom is that the finished result WILL have rotator control - in fact that is the whole point of my project. To write a tracking system which will actually track a satellite. In fact it will track a number of them.

The project is unlikely to be finished for another nine months or so - I am just beginning now - but when it is I will be more than happy to make sources and hardware

specifications available to anyone who wants them. I will post to this group when they are ready but don't hold your breath.

Thanks again to all those who helped, especially Neill Taylor <G4HLX> who sent me a PASCAL listing which did everything I wanted to do. I have never programmed in PASCAL and don't claim to understand it but his code was so well commented that it was quite easy to understand. It made a lot of murky things somewhat clearer.

Sorry for the exceptionally long post but I wanted to make sure that everyone who had helped knows how grateful I am. You all know who you are, sorry I couldn't reply individually but you wouldn't believe how much mail I got.

In my opinion the response to this request has justified my belief in both this list
and in the world-wide society of Radio Amateurs in general.

Thanks,

-Niall

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Niall Pagdin, Student Advisory (SC), Kingston University,
Kingston-upon-Thames, London, England.
E~Mail: niall@crystal.king.ac.uk

- G7PDX -

"Only those who attempt the absurd, achieve the impossible!"

End of Ham-Space Digest V94 #172
